

1135-VO-2047

Vance T. Blankers* (blankers@math.colostate.edu). *Hyperelliptic classes are rigid and extremal in genus two.*

A hyperelliptic class on a moduli space of pointed curves is the Chow class of the closure of the locus of hyperelliptic curves with ℓ marked Weierstrass points, m marked conjugate pairs of points, and n free marked points. We show that in genus two such classes are rigid and extremal in the cone of effective codimension- $(\ell + m)$ classes on $\overline{\mathcal{M}}_{2,\ell+2m+n}$ using the rich recursive structure of the relevant moduli spaces. Our result establishes an infinite family of rigid and extremal classes in arbitrarily-high codimension. (Received September 25, 2017)